

Public Health Preparedness and Situational Awareness Report: #2019:27

Reporting for the week ending 07/06/19 (MMWR Week #27)

July 12th, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS

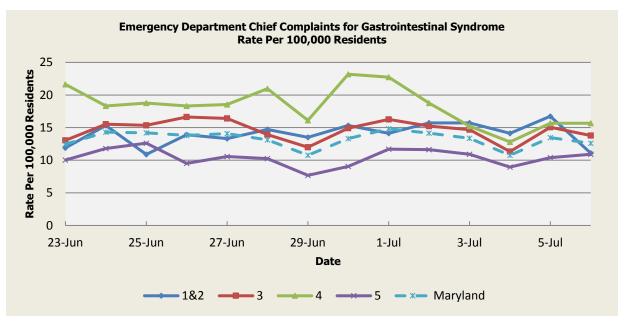
National: No Active Alerts

Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

Gastrointestinal Syndrome

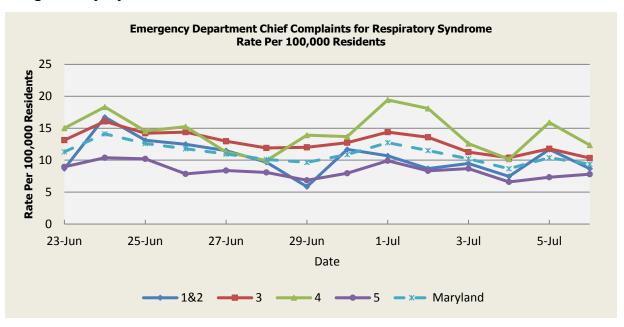


There were no Gastrointestinal Syndrome outbreaks reported this week.

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	13.26	15.10	15.90	10.24	13.15	
Median Rate*	13.11	14.87	15.46	10.13	13.00	

^{*} Per 100,000 Residents

Respiratory Syndrome

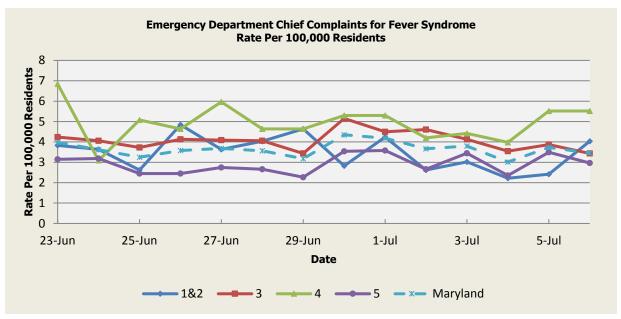


There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	12.66	14.74	15.08	9.98	12.77		
Median Rate*	12.10	14.18	14.35	9.65	12.28		

^{*} Per 100,000 Residents

Fever Syndrome

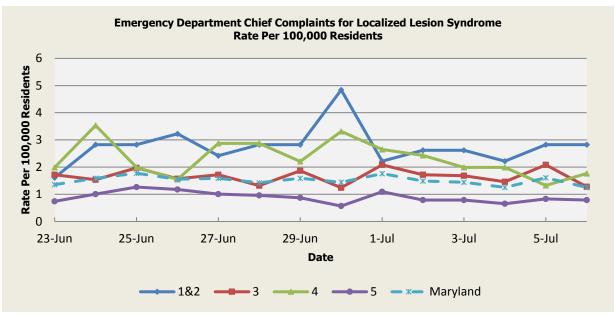


There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	3.08	3.90	4.11	3.04	3.52	
Median Rate*	3.02	3.80	3.97	2.92	3.40	

*Per 100,000 Residents

Localized Lesion Syndrome

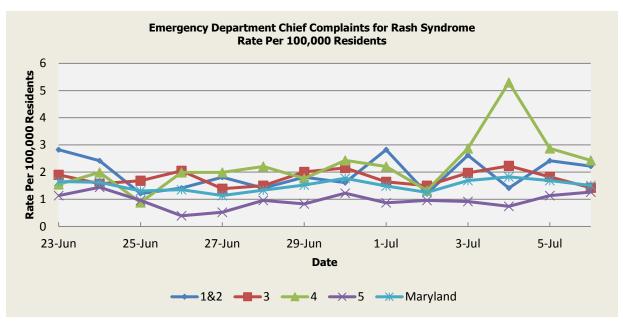


There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.13	1.79	2.04	0.91	1.42	
Median Rate*	1.01	1.72	1.99	0.87	1.37	

^{*} Per 100,000 Residents

Rash Syndrome

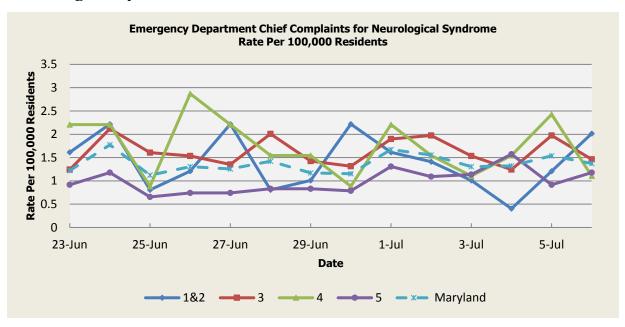


There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	1.24	1.68	1.76	0.98	1.38	
Median Rate*	1.21	1.61	1.77	0.92	1.32	

^{*} Per 100,000 Residents

Neurological Syndrome

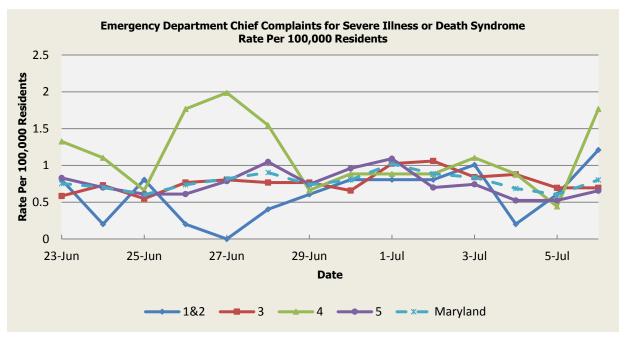


There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present						
Health Region	1&2	3	4	5	Maryland		
Mean Rate*	0.77	0.94	0.86	0.60	0.79		
Median Rate*	0.71	0.84	0.66	0.52	0.70		

^{*} Per 100,000 Residents

Severe Illness or Death Syndrome



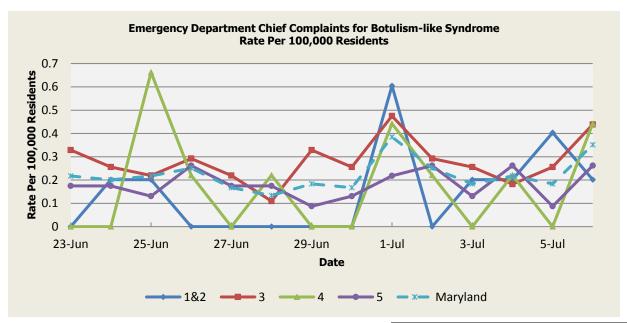
There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2 3 4 5 Maryla							
Mean Rate*	0.66	0.90	0.83	0.51	0.73			
Median Rate*	0.60	0.84	0.66	0.48	0.69			

^{*} Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome

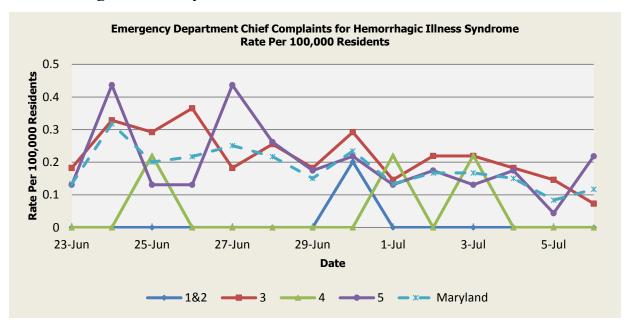


There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on, 6/23 (Regions 3,5), 6/24 (Regions 1&2,3,5), 6/25 (Regions 1&2,4), 6/26 (Regions 3,4,5), 6/27 (Region 5), 6/28 (Regions 4,5), 6/29 (Region 3), 6/30 (Region 3), 7/1 (Regions 1&2,3,4,5), 7/2 (Regions 3,4,5), 7/3 (Regions 1&2,3), 7/4 (Regions 1&2,4,5), 7/5 (Regions 1&2,3), 7/6 (Regions 1&2,3,4,5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	0.07	0.12	0.06	0.08	0.09	
Median Rate*	0.00	0.07	0.00	0.04	0.07	

^{*} Per 100,000 Residents

Hemorrhagic Illness Syndrome

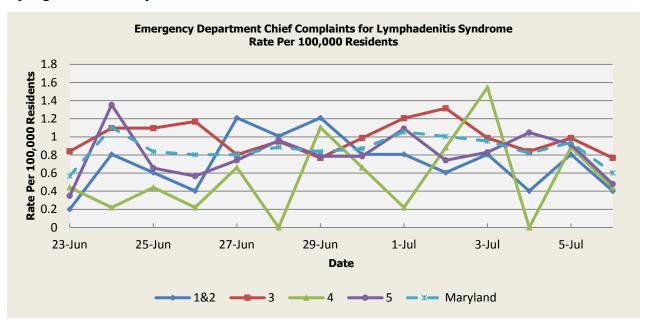


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on, 6/24 (Regions 3,5), 6/25 (Region 4), 6/26 (Region 3), 6/27 (Region 5), 6/28 (Region 5), 6/30 (Region 1&2), 7/1 (Region 4), 7/3 (Region 4). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.04	0.16	0.04	0.13	0.13			
Median Rate*	0.00	0.11	0.00	0.09	0.08			

^{*} Per 100,000 Residents

Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on, 6/24 (Regions 1&2,5), 6/26 (Region 3), 6/27 (Regions 1&2), 6/28 (Regions 1&2,5), 6/29 (Regions 1&2,4,5), 6/30 (Regions 1\$2,5), 7/1 (Regions 1&2,3,5), 7/2 (Regions 3,4), 7/3 (Regions 1&2,4,5), 7/4 (Region 5), 7/5 (Regions 1&2,4,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present							
Health Region	1&2	3	4	5	Maryland			
Mean Rate*	0.37	0.58	0.40	0.38	0.47			
Median Rate*	0.40	0.47	0.44	0.35	0.42			

^{*} Per 100,000 Residents

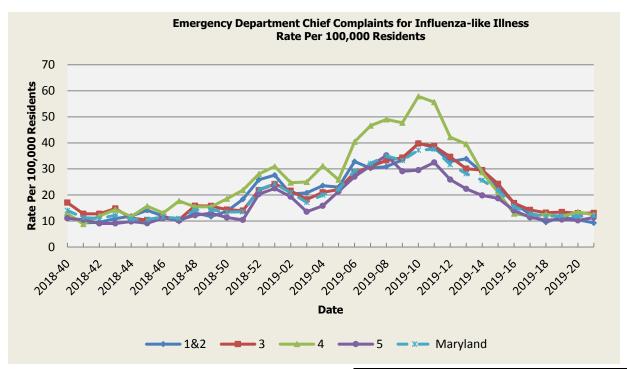
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.
(report continues on next page)

SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019).

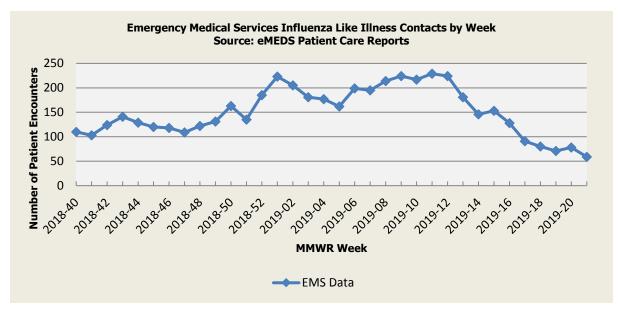
Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland	
Mean Rate*	10.26	13.39	12.94	11.33	12.30	
Median Rate*	7.66	10.38	9.27	8.80	9.49	

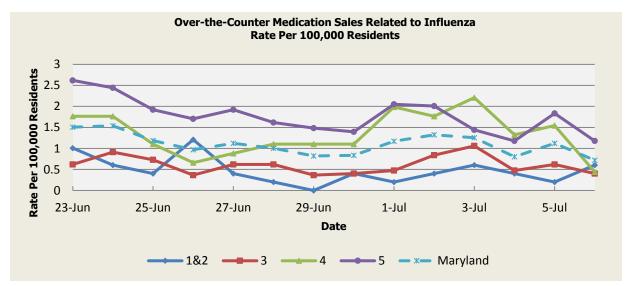
^{*} Per 100,000 Residents

Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Influenza-Related Medication Sales

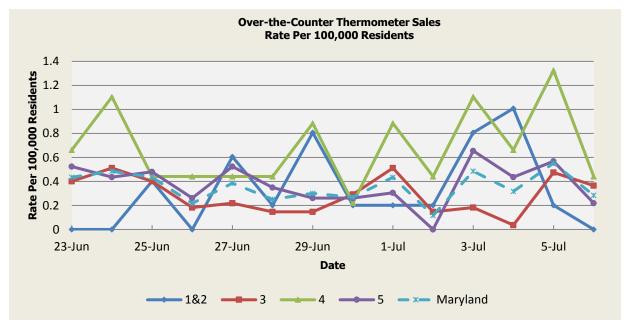


There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.52	4.54	2.70	7.93	5.61
Median Rate*	2.82	3.73	2.43	7.25	4.90

^{*} Per 100,000 Residents

Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.00	2.86	2.27	3.80	3.19
Median Rate*	2.62	2.74	2.21	3.71	3.10

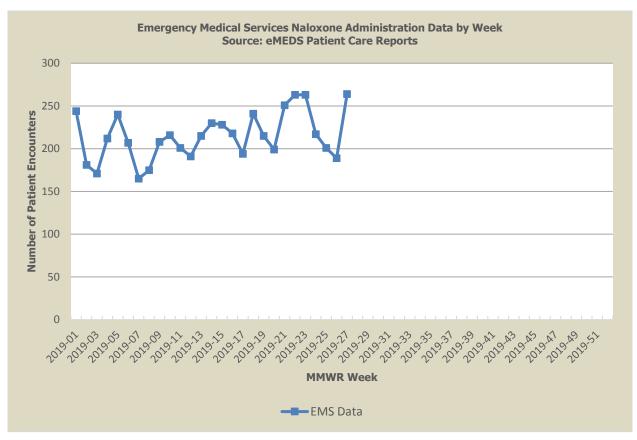
^{*} Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

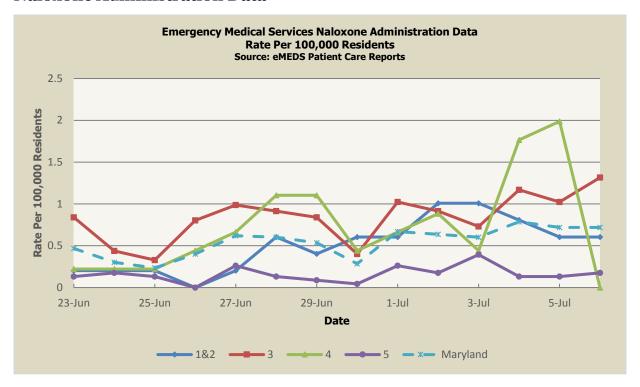
In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of July 11, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 861, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

ASPERGILLOSIS (WASHINGTON), 04 Jul 2019, Seattle Children's Hospital has revealed that one patient has died, and 5 others have been infected by a potentially dangerous mold that has forced the medical center to close all of its main operating rooms. The hospital disclosed the infections and death to The Seattle Times [Tue 2 Jul 2019] in response to follow-up questions regarding the closures of 4 operating rooms on its main Seattle campus [18 May 2019] because of _Aspergillus_ mold and of the remaining 10 operating rooms [24 May 2019]. The hospital says operating rooms have been infested by mold -- off and on -- for about a year likely because of deficiencies in the operating rooms' air handling and purification systems. "We are deeply saddened that one of our patients died after developing an _Aspergillus_ infection in 2018," Seattle Children's public relations manager Alyse Bernal told CBS News Tuesday in a written statement. Read More: https://www.promedmail.org/post/6551383

E. COLI EHEC (CALIFORNIA), 05 Jul 2019, County health officials said Friday [5 Jul 2019] that new probable _E. coli_ cases involving 2 young children are believed to be linked to contact with animals at the San Diego County Fair. So far, there are 4 confirmed _E. coli_ cases stemming from possible animal contact at the fair; there are now 3 probable E. coli cases, health officials said. One of the confirmed cases was a 2-year-old who died after visiting the fair and contracting _E. coli_, at which point the fair indefinitely closed its animal exhibits. The other confirmed _E. coli_ cases involve a 6-year-old boy, a 9-year-old boy, and a 13-year-old girl. People can avoid contracting the bacteria by thoroughly washing their hands after making contact with animals at places like farms, petting zoos and fair exhibits. Young children, older adults and people with weak immune systems are at particular risk, according to health officials. Read More: https://www.promedmail.org/post/6554115

VIBRIO VULNIFICUS (MULTISTATE) 05 Jul 2019, An Aransas county man has had 3 surgeries and is still in the hospital after he contracted _Vibrio_, a flesh-eating bacterium, while fishing on Ransom Island near Aransas Pass, according to a recent story from KRIS 6 NEWS. This is the 2nd flesh-eating incident that has been reported after visits to South Texas beaches. A Corpus Christi man underwent several life-saving surgeries after he contracted vibriosis from dipping his toes into the water near Waters Edge Park in Corpus Christi. According to the CDC, about 80 000 people a year are infected with vibriosis. The bacteria live in coastal waters and increase concentration when the water warms between May and October. People can also become infected by consuming undercooked or raw seafood. Read More: https://www.promedmail.org/post/6552325

LEGIONELLOSIS (**MICHIGAN**) 08 Jul 2019, The Michigan Department of Health and Human Services [MDHHS] has announced the state is experiencing an increase in legionellosis cases. To date in 2019, there have been 140 confirmed cases of legionellosis reported in 38 counties compared to 135 confirmed cases during the same timeframe in 2018, the department says. Confirmed cases include 19 in Oakland county, 16 in Wayne county, 13 in Macomb county, 11 in Genesee county, and 10 cases each in the City of Detroit and Kent county. "This increase corresponds with national increases in legionellosis. Legionellosis is most common in the summer and early fall when warming, stagnant waters present the best environment for bacterial growth in water systems. MDHHS and local health departments are

working to inform healthcare providers of the increase in cases and share information regarding testing and treatment." Read More: https://www.promedmail.org/post/6557030

CYCLOSPORIASIS (FLORIDA) 11 Jul 2019, Thirty people or more have reported contracting parasitic infections after a charity banquet at a restaurant in Jacksonville, FL. A local television news outlet is reporting that people who were at an Exchange Club banquet at Cooper's Hawk Winery & Restaurant developed gastrointestinal illnesses with some having been confirmed infected by the Cyclospora parasite. It can take 2 days to 2 weeks after ingesting Cyclospora for symptoms of the infection known as cyclosporiasis to develop, according to the U.S. Centers for Disease Control and Prevention. Once a person becomes ill, it can take 2 or more weeks for initial and confirmation laboratory test results to be logged by outbreak investigators. Cyclospora outbreaks are frequently linked to fresh produce such as cilantro. Read More: https://www.promedmail.org/post/6563209

INTERNATIONAL DISEASE REPORTS

ANTHRAX (ANGOLA) 11 Jul 2019, Six people died and 12 are hospitalized for consuming anthrax-contaminated cattle in the southern Angolan province of Huila, official sources said. The incident took place last May [2019] in Mulondo, in the municipality of Matala, the provincial supervisor for Health Promotion in Huila, Julio Madaleno, told Angola Press. The victims may had eaten the meat of dead animals (not processed for human consumption), Madaleno said after clarifying that the situation is controlled by a multidisciplinary team of doctors and veterinarians in the area, who collected samples, vaccinated the animals and treated the sick. Read More: https://www.promedmail.org/post/6563393

JAPANESE ENCEPHALITIS (TAIWAN) 11 Jul 2019, The Taiwan Department of Disease Control reported on a new confirmed case of Japanese encephalitis (JE) in the country. The patient is a 50-year-old male in Shalu district, Taichung city. He developed fever and vomiting on [21 Jun 2019]. He was treated on [23 Jun 2019] because the symptoms did not improve. He was admitted to the hospital. The case has recovered and been discharged. This brings the total JE cases to 12, including one death. Read More: https://www.promedmail.org/post/6562122

LEGIONELLOSIS (**EUROPE**) 07 Jul 2019, A health spa is the "likely source" of an outbreak of _Legionella_ infection, which has left 9 people in hospital, Public Health England (PHE) has said. 14 people who attended Healax Salt Caves in Bournemouth in June [2019] have contracted either Legionnaire's disease or the less serious Pontiac fever. A further 39 people who reported symptoms have not had infections confirmed by laboratory tests. The 9 worst-affected patients are now recovering at home. Read More: https://www.promedmail.org/post/6555856

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

<u>NOTE</u>: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE		
	Allegany County		
Pagions 1 & 2	Frederick County		
Regions 1 & 2	Garrett County		
	Washington County		
	Anne Arundel County		
	Baltimore City		
Pagion 3	Baltimore County		
Region 3	Carroll County		
	Harford County		
	Howard County		
	Caroline County		
	Cecil County		
	Dorchester County		
	Kent County		
Region 4	Queen Anne's County		
	Somerset County		
	Talbot County		
	Wicomico County		
	Worcester County		
	Calvert County		
	Charles County		
Region 5	Montgomery County		
	Prince George's County		
	St. Mary's County		

